

CFW Series Filter Owner's Manual

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS

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⚠ WARNING

Before installing this product, read and follow all warning notices and instructions accompanying this filter. Failure to follow safety warnings and instructions can result in severe injury, death, and property damage. Call (800) 831-7133 for additional free copies of these instructions.

Important Notice



Attention Installer.

This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

⚠ WARNING

Failure to operate your filter system or inadequate filtration can cause poor water clarity obstructing visibility in your pool and can allow diving in shallow pool areas, or diving into or on top of obscured objects which can cause serious bodily injury or drowning.

Pentair Pool Products

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Because reliability matters most

SECTION I. POOL WATER MAINTENANCE

Properly treated pool water can prolong the life of your cartridges and insure a sparkling clear pool. Pool chemistry is a specialized area and you should consult your pool service specialist for specific details.

SECTION II. NEW POOL INSTALLATIONS

Initial Start Up - It may require a few days to clear up the pool water due to debris found in the plumbing lines, i.e., plaster dust, etc. Check the pressure gauge periodically for increase in pressure. This is normal the first week of filtering, and it is suggested that the cartridges be removed and cleaned frequently until the water clears up. Frequent cleaning of the cartridges in this initial period will also help to increase the life of the cartridges and give you longer filtering cycles thereafter.

Suggested Installation:

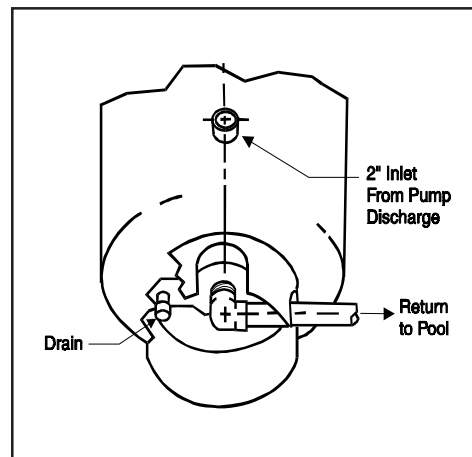
1. Install 2 in. PVC elbow (included with the filter) on bottom tank nipple, for return line to pool.
2. For convenience when draining the filter - remove the drain cap and install a 3/4 in. 90 deg. elbow. Install a 3/4 in. valve or replace the drain cap on the opposite end of the nipple.

A check valve is recommended between the filter and heater to prevent hot water back-up from damaging the filter internals.

The maximum operating pressure of the tank is 50 psi. Never operate the unit above this pressure or attach a pump to this filter that has a shut-off pressure higher than 50 psi.

Never install a chemical feeder or ozonator upstream of the filter. Always locate downstream with a check valve between the feeder and the filter.

A positive shut off valve is not recommended downstream of the filter and/or heater. If the system is ever run with such a valve closed, the internal air vent becomes inoperative and an explosive situation could exist. Running the system with no flow can seriously damage the equipment.



⚠ WARNING



THIS FILTER OPERATES UNDER HIGH PRESSURE. WHEN ANY PART OF THE CIRCULATING SYSTEM (e.g., LOCK RING, PUMP, FILTER, VALVES, ETC.) IS SERVICED, AIR CAN ENTER THE SYSTEM AND BECOME PRESSURIZED. PRESSURIZED AIR CAN CAUSE THE LID TO BLOW OFF WHICH CAN RESULT IN SEVERE INJURY, DEATH, OR PROPERTY DAMAGE. TO AVOID THIS POTENTIAL HAZARD, FOLLOW THESE INSTRUCTIONS.

To Operate Filter

1. Set valves if any, to filter position.
2. Open air relief valve on top of filter. Failure to open the air relief valve could cause the lid to separate resulting in serious bodily injury and/or major property damage.
3. Stand clear of the filter.
4. Start pump and wait until a steady jet of water emerges from relief valve, then close valve.
5. Filter will operate efficiently until pressure gauge indicates time for cleaning cartridges. Note these pressures below. Depending on water conditions and pool usage, the cartridges may be cleaned and re-used several times before replacement is needed.

Filter Starting Pressure

Note the pressure at start up when filter is clean. This will vary from pool to pool depending on pool line size. Write this pressure in the following space. _____ psi

Cleaning Required At:

Filter requires cleaning when pressure increases 8-10 psi over clean filter starting pressure. _____ psi

SECTION III. REMOVING CARTRIDGES FOR CLEANING OR REPLACING

⚠ WARNING

To prevent possible serious bodily injury, equipment damage and/or major property damage, always turn the pump off before changing any valve positions or servicing the filter.

1. Turn pump off.
2. Drain filter--open drain valve and tank air relief valve and close all other valves.
3. To remove the clamping ring, partially unscrew the adjustment knob, releasing the head of the T-bolt from the slotted bracket.
4. Remove tank lid with screwdriver or with the lid removal tool included with the filter (see below). Avoid cutting rubber O-ring or bending lid or tank O-ring channel.
5. Unscrew wing nut; remove washer and holding wheel assembly.
6. Lift out cartridges and clean as described below.
7. Replace clean cartridges in manifold.
8. Replace holding wheel assembly over retaining rod; place washer over rod and then screw wing nut on rod.

⚠ CAUTION

Do not over tighten wing nut. Secure finger tight only.

9. Remove the rubber O-ring and clean both O-ring and channel. Lubricate O-ring with a non-water soluble grease, such as silicone grease and replace O-ring in channel.
10. Clean the inside surface of the tank lid which O-ring seals against. Place lid on tank. Push down on lid to seat in place.
11. Replace the clamping ring. Engage the head of the T-bolt into the slotted bracket and tighten the adjustment knob. (Hand tighten only.)
12. To restore to filter operation again, refer "To Operate Filter" instructions.
13. When winterizing, insure that all water is removed from the lower internal portion of the filter.

How to Use the Filter Lid Opener Tool.

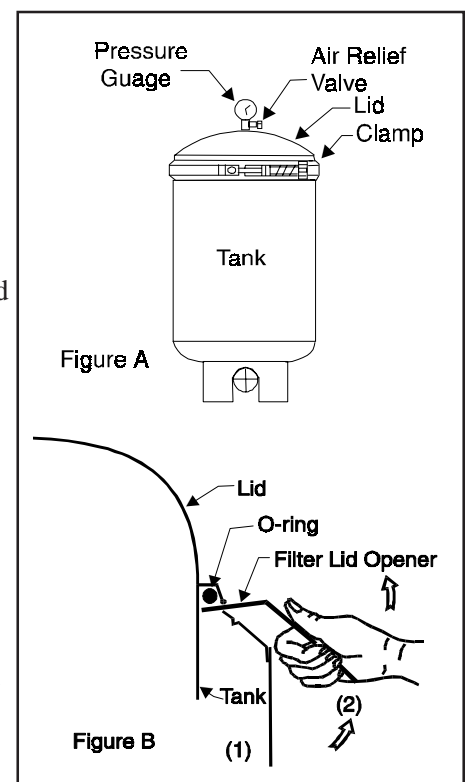
1. Turn pump off.
2. Open the High Flow™ manual air relief valve and wait for tank water to drain into pool; see Figure A.
3. Remove the clamp ring.
4. Insert the filter lid opener as shown in Figure B (1). The tool fits under the O-ring.
5. Lift the tank lid with the filter lid opener in several places around the tank; see Figure B (2). The Pentair Pool Products Filter Lid Opener Tool may be used on any stainless steel filter tank manufactured by Pentair Pool Products.

Cleaning Cartridges.

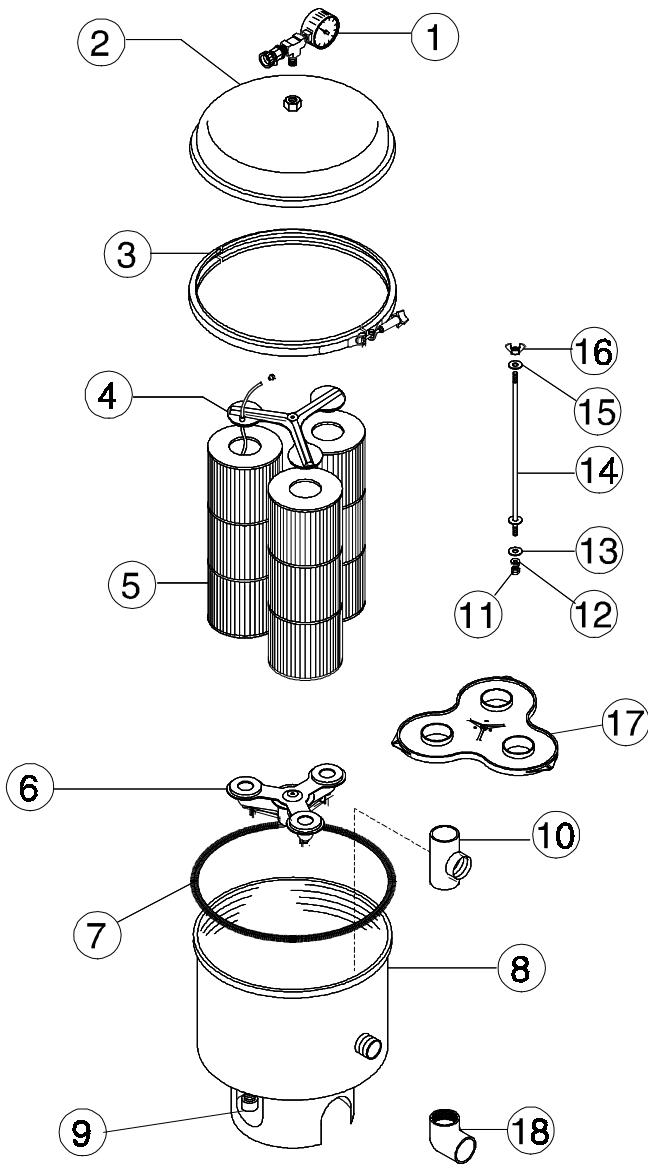
NOTE

Handle carefully to avoid puncturing pleated material.

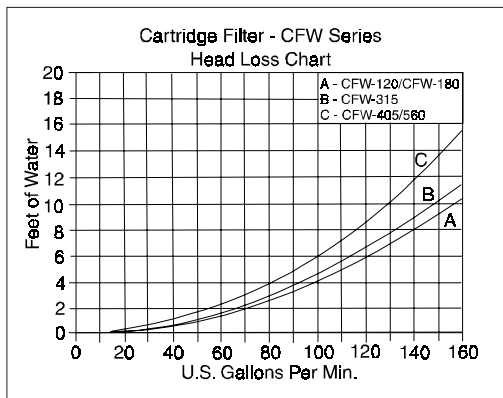
1. The use of a garden hose with a pressure nozzle on the end will normally be all that is required to clean dirt from cartridges.
2. If high calcium deposits are detected, they may be removed by soaking cartridges in a solution of 1 part muriatic acid to 20 parts water. Use a plastic pail or similar plastic container.
3. Suntan oils that have coated cartridges, thus restricting normal flow may be removed by soaking cartridges in a mild solution of Filter Free* and water. 60 minutes of soaking time will usually break oil coating from cartridge. Rinse with clean water.
4. Algae may be removed from cartridges by using a strong solution of Filter Free* and water. Soak cartridges as long as necessary. Rinse with clean water. *Filter Free is a product of Hydrotech Chemical Corp.



SECTION IV. REPLACEMENT PARTS, Models CFW-120, CFW-180, CFW-315, CFW-405, & CFW-560.



Head Loss Chart - Model CFW-120, CFW-180, CFW-315, CFW-405, & CFW-560



Item	Part No.	Description
1	073029	Accessory bag CFW-120/180/315/405 includes:
	155050	Gauge 1/4 in. 60 lbs.
	071982	Tee 1/4 brass
	075207	Valve air release 1/4 in.
	071389	Nipple brass
	010126	Lid opener tool (not shown)
2	073119	Lid with bushing 2000.50 includes:
	070548	Bushing 3/4 hex x 7/8
	070952	Gasket, lid
	071407	Nut 5/8-18 3/4 hex x 17-1/6
3	197107	Clamp ring 2000 knob style includes:
	076033	Knob, plastic
4		Holding wheel assy. w/vent tube & screen cap
	073097	CFW-120
	073098	CFW-180
	070233	CFW-315
	074931	CFW-405
	175698	CFW-560
	075279	Vent tube 46 in. (not shown)
5		Cartridge
	R173310	CFW-120 - 11-1/8 in.
	R173312	CFW-180 - 19-1/2 in.
	R173315	CFW-315 - 25-5/8 in.
	R173314	CFW-405 - 16 in.
	175690	CFW-560 - 19 in.
	073995	Kit conversion (converts CFW-100 to CFW120 □)
	073996	Kit conversion (converts CFW-150 to CFW180 □)
6	074025	Manifold CFW/CFM 2 in.
	073227	Kit conv. manifold w/2 in. X 1 1/2 in., reducer bushing (not shown)
7	071442	O-ring, channel 2000.47 w/red line
8		Tank with 2 in. nipple
	073398	CFW-120
	073400	CFW-180
	070235	CFW-315
	170006	CFW-405/560
9	070560	Cap drain plug- 3/4 in. PVC
10	071988	Tee 2 in. PVC SxSxFIP
11	071406	Nut 1/4-20 SS hex
12	072172	Washer lock 1/4 in. SS
13	072183	Flat washer 1/4 x 5/8
14		Center rod
	070664	CFW-120
	070665	CFW-180
	070232	CFW-315
	074933	CFW-405
	175691	CFW-560
15	072173	Washer 5/16 i.d. X 3/4 o.d.
16	071404	Nut wing 8200.30 1/4-20
17	075014	Spreader CFW-405/560
18	074628	Elbow 2 in. 90° PVC SXFIP

□ Includes: center tod, manifold & holding wheel assy.
- cartridges not included.

SAVE THESE INSTRUCTIONS.